## Amendments to the Claims

1. (Canceled).

2. (Currently Amended) A method of analyzing a flow for an accounting application, comprising:

    capturing an Internet Protocol (IP) IP packet from a network segment to form a captured IP packet;

    determining if the captured IP packet includes a message of a first protocol type for providing error reporting, the message having an IP packet that triggered an error event embedded within thereby forming an embedded IP packet, the embedded IP packet being of a second protocol type and having a flow associated therewith;

    correlating the flow associated with the embedded IP packet to a stored parent flow of a given state, thereby associating the error event with the given state of the stored parent flow; and

    using the results of the correlating to provide well-informed accounting information related to the flow to the accounting application.

3. (Original) The method of claim 2, wherein the first protocol type is the Internet Control Message Protocol.

4. (Original) The method of claim 2, wherein the second protocol type is the Transmission Control Protocol.

5. (Original) The method of claim 2, wherein the first protocol type is the Internet Control Message Protocol and the second protocol type is the Transmission Control Protocol.

8. (Previously Amended) The method of claim 6, wherein using comprises:

    reporting a transaction stop indication in response to the change of the given flow state to the rejected state.

9. (Currently Amended) The method of claim 2, wherein correlating further comprises:

3

processing the captured Internet Protocol (IP) ~~IP~~ packet.

10. (Original) The method of claim 9, wherein the processing comprises:

using header information to map the flow to a flow stored in a local store.

11. (Original) The method of claim 10, wherein the header information includes a flow key.

12. (Original) The method of claim 11, wherein the local store stores for the stored flow, flow state information including a flow key associated with metrics and state information, and wherein processing further comprises:

matching the flow key to the flow key of the stored flow.

13. (Original) The method of claim 12, wherein processing further comprises:

using the flow to update the metrics and the state information of the stored flow.

14. (Original) The method of claim 13, wherein processing further comprises:

providing an accounting record to the accounting application, the accounting record reflecting having updated the metrics and the state information of the stored flow.

15. (Original) The method of claim 11, wherein processing further comprises:

storing flow state information in association with the flow key for the flow in the local store if the header information cannot be used to map the flow to a stored flow.

Claims 16-18 (Canceled).

19. (Currently Amended) A computer program product residing on a computer-readable medium for analyzing a flow for an accounting application, comprising instructions to cause a computer to:

capture an Internet Protocol (IP) ~~IP~~ packet from a network segment to form a captured IP packet;

4

determine if the captured IP packet includes a message of a first protocol type for providing error reporting, the message having an embedded IP packet that triggered an error event, the embedded IP packet being of a second protocol type and having a flow associated therewith;

correlate the flow associated with the embedded IP packet to a stored parent flow of a given state to associate the error event with the given state of the stored parent flow; and

use results of the correlating to provide well-informed accounting information related to the flow to the accounting application.

20. (Previously Amended) The computer program product of claim 19, wherein the first protocol is the Internet Control Message.

21. (Previously Amended) The method of claim 19, wherein the second protocol type is the Transmission Control Protocol.

22. (Previously Amended) The method of claim 19, wherein the first protocol type is the Internet Control Message Protocol and the second protocol type is the Transmission Control Protocol.

23. (Canceled).

24. (Currently Amended) A system for flow of network packet data, comprising:

a processor;

a memory storing a computer program product residing on a computer-readable medium for analyzing a flow for an accounting application, comprising instructions to cause a computer to:

capture an Internet Protocol (IP) IP packet from a network segment;

determine if the captured IP packet includes a message of the a first protocol type for providing error reporting, the message having an embedded IP packet that triggered an error event, the embedded IP packet being of the a second protocol type and having a flow associated therewith;
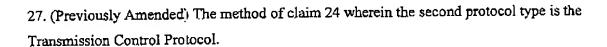
5

correlate the flow associated with the embedded IP packet to a stored parent flow of a given state to associate the error event with the given state of the stored parent flow; and

use the results of the correlating to provide well-informed accounting information related to the flow to the accounting application.

25. (Canceled).

26. (Previously Amended) The computer program product of claim 24 wherein the first protocol is the Internet Control Message.

27. (Previously Amended) The method of claim 24 wherein the second protocol type is the Transmission Control Protocol.

28. (Previously Amended) The method of claim 24 wherein the first protocol type is the Internet Control Message Protocol and the second protocol type is the Transmission Control Protocol.

6